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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,069	12/13/2001	Daniel Perez	2019.312	6215

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EXAMINER

LAXTON, GARY L

ART UNIT	PAPER NUMBER
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2838

DATE MAILED: 08/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,069

Applicant(s)

PEREZ, DANIEL

Examiner

Gary L. Laxton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The title does not differentiate from the numerous other methods and apparatuses for preventing overload in a circuit.

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 5, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al.

Concerning claim 1, Kim et al disclose a power supply circuit with overload protection (figure 1) comprising: a current sensor (Rs) for sensing the levels of current entering a circuit (200); a controller (circuits 110, 120, 130, 150, 160) that monitors current levels sensed by the current

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sensor; a switch (M1) responsive to the controller wherein the controller opens the switch to thereby turn off current entering the circuit (200) when a specific current level is sensed (abstract; col. 3 lines 1-17); and wherein the control circuit continues to periodically (timer circuit 120 toggles latch 130; abstract; col. 3 lines 53-56) sense current levels at the current sensor and closes the switch (M1) when current levels have fallen below the preset level and thereby allow current to flow into the circuit (200) again (abstract; col. 3 lines 44-56).

Concerning claim 5, switch M1 is a semiconductor device connected to the controller (circuits 110, 120, 130, 150, 160) to perform switching functions in response to a signal from the controller, obviously.

Concerning claim 6, a power inductor and an overload indicator (170) actively attached to the circuit (200) to respectively signal the circuit is operating within normal parameters or is in an overload condition (col. 3 lines 19-21: "off" normal – "on" fault detected)

Concerning claim 7, the controller after shutting off said switch as the result of sensing preset current levels periodically turns on said switch for a momentary period of time to determine if preset or greater amounts of current will still be continued to be drawn (col. 3 lines 55 and 56).

5. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kosugi.

Concerning claim 1, Kosugi discloses a power supply circuit with overload protection (figure 1) comprising: a current sensor (142) for sensing the levels of current entering a circuit (116, load); a controller (circuits 144, 146, 154, 152) that monitors current levels sensed by the current sensor; a switch (120) responsive to the controller wherein the controller opens the switch to

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thereby turn off current entering the circuit when a specific current level is sensed (abstract; col. 3 lines 63-67; col. 4 lines 1-20); and wherein the control circuit continues to periodically sense current levels at the current sensor and closes the switch (120) when current levels have fallen below the preset level and thereby allow current to flow into the circuit again (abstract; col. 4 lines 20-30).

Concerning claim 2, Kosugi discloses voltage produced by the circuit is regulated (col. 3 lines 53 and 54).

Concerning claim 3, Kosugi discloses a voltage monitor for monitoring voltage produced by the circuit and said controller regulates voltage levels produced by said circuit based on readings from said voltage monitor to which said controller is actively connected (figure 2, Vout, 112; col. 3 lines 45-52).

Concerning claim 4, Kosugi discloses a filter (capacitors in rectifier 116 of figure 2 provide filtering) to filter the voltage generated by the circuit.

Concerning claim 5, Kosugi discloses switch 120 is a semiconductor device (see figure 2) connected to the controller (152,) to perform switching functions in response to a signal from the controller, obviously.

Concerning claim 7, Kosugi discloses the controller (circuits 144, 146, 154, 152) after shutting off said switch as the result of sensing preset current levels periodically turns on said switch for a momentary period of time to determine if preset or greater amounts of current will still be continued to be drawn (col. 4 lines 20-30).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al in view of Malinowski.

Concerning claim 8, Kim et al discloses a method for preventing overload in circuit comprising the steps of: a) monitoring current levels of current entering a circuit (figure 1, Rs); b) shutting the circuit down when the current levels reach a preset level (abstract; col. 44-54); c) continuing to sample the current being supplied for the circuit (col. 3 lines 54-56); d) determining when the current levels of the current being supplied to the circuit have fallen below the preset levels (col. 3 lines 55, 56); e) resetting the circuit to accept current for operation after determining the current levels have fallen below the preset levels (col. 3 lines 57-65); and f) continuing to monitor the current levels after resetting of the circuit (col. 3 lines 32-42).

However, Kim et al do not disclose a security system circuit.

Malinowski teaches a security system with a power supply (28) for providing power to the security system.

It would have been obvious to provide a power supply with overload protection in order to prevent damage to the load circuit (e.g. security system).

Therefore, it would have been obvious to utilize a power supply system with load protection functions taught by Kim et al in the circuit of Malinowski (28 of figure 2) in order to provide a

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power supply that is protected from overload in order to prevent damage to the load circuit (e.g. the security system circuit).

Concerning claim 9, Kim et al disclose monitoring the current levels to determine if they have returned to acceptable levels includes (abstract; col. 3 lines 30-60): momentarily allowing the circuit to draw current to determine the levels at which the circuit is drawing current and determine if they have fallen below the preset levels (col. 3 lines 55 and 56).

Concerning claim 11, Kim et al disclose indicating (indicator (170)) that the circuit is experiencing an overload.

8. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosugi in view of Malinowski.

Concerning claim 8, Kosugi discloses a method for preventing overload in circuit comprising the steps of: a) monitoring current levels of current entering a circuit (figure 1, 132); b) shutting the circuit down when the current levels reach a preset level (134); c) continuing to sample the current being supplied for the circuit (col. 4 lines 28-30); d) determining when the current levels of the current being supplied to the circuit have fallen below the preset levels (134); e) resetting the circuit to accept current for operation after determining the current levels have fallen below the preset levels (col. 4 lines 28-30); and f) continuing to monitor the current levels after resetting of the circuit (col. 3 lines 54-67; col. 4 lines 1-20).

However, Kosugi do not disclose a security system circuit.

Malinowski teaches a security system with a power supply (28) for providing power to the security system.

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It would have been obvious to provide a power supply with overload protection in order to prevent damage to the load circuit (e.g. security system).

Therefore, it would have been obvious to utilize a power supply system with load protection functions taught by Kosugi in the circuit of Malinowski (28 of figure 2) in order to provide a power supply that is protected from overload in order to prevent damage to the load circuit (e.g. the security system circuit).

Concerning claim 9, Kosugi discloses monitoring the current levels to determine if they have returned to acceptable levels includes (abstract; col. 4 lines 20-38): momentarily allowing the circuit to draw current to determine the levels at which the circuit is drawing current and determine if they have fallen below the preset levels (col. 4 lines 28-30).


Concerning claim 10. Kosugi provides a regulated power supply (col. 3 lines 52 and 53).

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Laxton whose telephone number is (703) 305-7039. The examiner can normally be reached on Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (703)308-1680. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9306 for regular communications and (703)-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

 8/11/03
MICHAEL SHERRY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

GLL
August 6, 2003